

Exhibit D

I.T. FUNCTIONAL SCOPE DOCUMENT

Order Management System Implementation

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From: *Jimmy Herndon*

Table of Contents

| | |
|------------------------------------------------------------------|-----------|
| Order Management System Implementation | 1 |
| Section 1.0 - Update Overview | 3 |
| 1.1 <i>Executive Overview</i> | 3 |
| Section 2.0 - Client Information | 4 |
| 2.1 <i>Client Company Overview</i> | 4 |
| 2.2 <i>Vendor Company Overview</i> | 4 |
| 2.3 <i>Contact List</i> | 5 |
| Section 3.0 - Project Information | 6 |
| 3.1 <i>High Level Technology Solution</i> | 6 |
| 3.2 <i>Project Business Releases</i> | 8 |
| 3.3 <i>WBS High Level Milestones</i> | 9 |
| 3.4 <i>Functional Area Technology Solution Information</i> | 9 |
| 3.4.1 Functional Area Technology Solution (Scope) | 9 |
| 3.4.2 Limitations / Out of Scope | 9 |
| 3.4.3 Critical Success Factors | 10 |
| 3.4.4 Assumptions | 10 |
| 3.4.5 As-Is Current Systems Model | 12 |
| 3.4.6 Required Reports | 12 |
| 3.4.7 Risk / Risk Mitigation Strategy | 12 |
| 3.4.8 E-Commerce Data Delivery | 13 |
| 3.4.9 Infrastructure Technical Architecture | 13 |
| Section 4.0 - Budget | 13 |
| 4.1 <i>Update Project Budget Cost Model</i> | 13 |
| Section 5.0 – Disclaimer / Approvals | 13 |
| 5.1 <i>Disclaimer</i> | 13 |
| 5.2 <i>Signature Page</i> | 13 |

Section 1.0 - Update Overview

1.1 Executive Overview

The primary purpose of the Order Management System (OMS) is to provide the capability to share on-line via the Internet information concerning all aspects of a planned shipment with our customers and all their suppliers. This combination of route planning data and optimized shipment information based on the customer's order is known as a Logistics Release (LR).

The publishing of the Logistics Release will provide many benefits to our customers, their suppliers and will allow Ryder Logistics Engineering to:

- To plan routes that would pick up and deliver for multiple customers. This is a key strategic goal to Ryder's future ability to create and manage efficient and competitive supply chain networks. Ryder needs this tool to enable the development of more complex solutions than the supply chain networks currently built for dedicated customers.
- Optimize shipments to provide suppliers the number of parts and/or packages/shippable containers required for a particular shipment by the customer. Currently, suppliers make these decisions on their own and may not package the parts in the most efficient manner possible for final delivery.

The second major offering of OMS is to provide electronic confirmation of the actual shipments made by suppliers (known as Advanced Shipping Notification or ASNs) based on the Logistics Release.

OMS will provide the following benefits regarding ASNs:

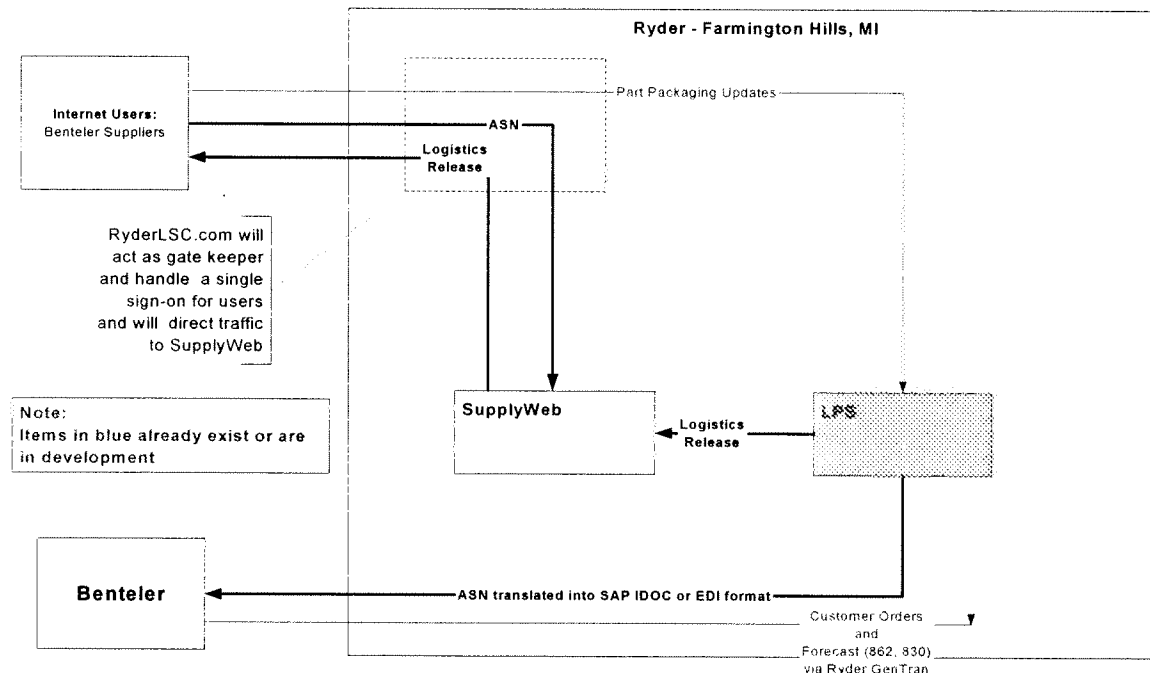
- Many suppliers do not have the capability of sending EDI. OMS will allow all non-EDI capable suppliers the ability to send ASNs to customer utilizing a single common tool. These suppliers will not have to purchase EDI tools on their own..
- Supplier can create ASNs on-line directly from the Logistics Release requiring few keystrokes to complete each transaction. By creating the ASN from the Logistics Release, the details of the delivery including plant, expected arrival and delivery date / time and related purchase order can be included in the message to the customer.
- Customer receives ASNs from entire supply base in their preferred format. Ryder operations will have access to the ASN for use in shipment verification.
- Supplier can print the Bill of Lading directly from the ASN entered as well as print a Bar Code label for the containers, pallets or packages.
- Customers would have the ability to receive ASNs from their entire supply base and receive responses on all their published orders.
- Ryder would translate and send ASNs to the customer in the customer's preferred format.

In addition to providing Logistics Releases and ASN capabilities in the short term, future OMS offerings will target customers who use other procurement methods such as Kanban replenishment and Supplier Managed Inventory (SMI also known as Vendor Managed Inventory).

This proposal will implement OMS by integrating two applications: SupplyWeb from Brain North America and the Logistics Planning System (LPS) currently under construction by Ryder IT. LPS is being created in order to consolidate the eight APS systems currently in use and to create the

capabilities that will allow Ryder Logistics Engineers to build more complex and efficient logistics networks that can pickup parts for multiple customers on a single route.

SupplyWeb will provide the Web visibility for the suppliers and the customer to Logistics Releases and the ability to create ASNs. SupplyWeb has a rich set of reporting and download functions that will allow us to offer a complete solution for the OMS starting with the first implementation. In addition, SupplyWeb fully supports Supplier Managed Inventory and Kanban Replenishment procurement methods as well as visibility to customer purchase orders for part shipments.



Section 2.0 - Client Information

2.1 Client Company Overview

2.2 Vendor Company Overview

Brain North America, Microsoft and IBM are the major vendors of software and software tools that will be used in this proposal.

Brain North America will provide the supply chain management tool that will be used for online publishing and collaboration by Ryder, Ryder customers and their suppliers. Brain North America is a provider of total business solutions for e-Business and Supply Chain Management. The company is a part of Agilisys with 875+ employees in 20 countries supporting over 2,000 manufacturing system installations in 31 countries. The capabilities of Brain's product, SupplyWEB, and LPS will be sold to existing Ryder Logistics customers, and marketed to Ryder clients under the private Ryder Logistics

RYDER IT

label. SupplyWEB is capable of communicating with many different ERP systems, on many different platforms.

Creation and processing of the Logistic Release will be developed using .NET development tools and technology from Microsoft and IBM. Microsoft Visual Studio.NET will be used for code development. IBM will supply a modeling and testing tools from their newly acquired purchase of the Rational Software Company.

2.3 Contact List

| Name | Office Phone | Title | Company | Location | e-mail |
|---------------|--------------|---------------------|------------|------------------|--------|
| James Herndon | | SDI IT Director | Ryder | Nashville | |
| John Holbel | | LPS Product Manager | Ryder | Farmington Hills | |
| Tony Han | | Lead IT Developer | Contractor | Farmington Hills | |
| Tom Kroswek | | LE Director | Ryder | Farmington Hills | |
| Tony Vites | | IT PM | Ryder | Miami | |

Section 3.0 - Project Information

3.1 High Level Technology Solution

Approach

Utilizing the new Logistics Planning System (LPS) currently in development, Ryder logistics engineers (LEs) will be able to create the required information for the Logistics Release and publish this via the Web.

The project funded by the OMS RCE will:

- 1) Install Brain's SupplyWeb application and database at Farmington Hills.
- 2) Develop and implement the Logistic Release capability into existing Ryder LPS product. LPS will be the repository of all supplier, part packaging and customer information. LPS will be the primary tool of Logistics Engineers who will use information from customers and suppliers to create optimized route schedules.
- 3) Integrate SupplyWeb with LPS to produce the first OMS offering that will provide the following services:
 - a) Provide a 'Logistics Release' to suppliers that they can access over the Internet. A logistics release is defined as the route plan matched to EDI 862 demand data. This will include a LPS enhancement that will create a standard XML formatted Logistic Release Transaction and the mechanism to push this data to the SupplyWEB Logistic Release API. The logistic release plan can be received by suppliers and carriers via web. SupplyWeb will allow release information to be downloaded in:
 - i) XML format which can then be loaded into the Supplier's ERP system
 - ii) Spreadsheet format for use in Microsoft Excel.
 - b) Allow non-EDI capable suppliers to update and return the logistics release to Ryder as a shipment notification (ASN). Ryder will then forward the ASN to the customer. SupplyWeb will
 - i) Validate ASN information entered for correctness (i.e. parts that do not belong to the supplier cannot be entered.)
 - ii) Display the shipment history of what the supplier has shipped (dates, quantities, cumulative quantities to date and return quantities).
 - iii) Bar code label printing based on the ASNs entered in the SupplyWeb.

Ryder will install and leverage Brain's SupplyWeb application, which will receive and send information to and from the LPS system. The customer's suppliers, as primary users of the application, will be given access to the application over the Internet.

The application would be hosted at Ryder's computer center at Farmington Hills, Michigan and access would be provided through the RyderLSC web portal. There would be a dual sign-on for the user - first to the Ryder portal and then to the SupplyWeb application.

- Ryder would need to

- ## RYDER APPLICATIONS

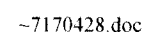


Figure 1: Data flow for OMS using the SupplyWeb product

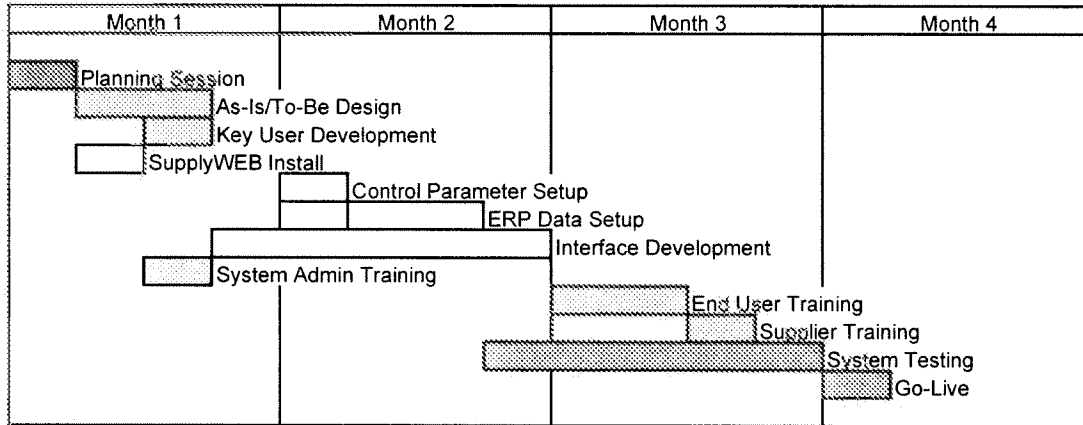
- 4) SupplyWeb will be setup with the following capabilities for future customer implementations. Additional integration work between SupplyWeb, LPS and other Ryder systems will be required for their implementation and is not funded or provided for in this proposal.
 - a) Kanban - Automated inventory replenishment system based upon consumption.
 - i) Exception Handling workbench for material handlers detailing inventory shortages, non-standard pack, and over-shipments
 - ii) Loop size optimization through standard Lean manufacturing calculation methods
 - iii) Exception based notification with early warning alerts
 - iv) Delivery performance ratings
 - b) Supplier Managed Inventory - Provides a supplier the ability to manage inventory levels for their parts at the customer's site.
 - i) A graphical Inventory Status screen shows minimum and maximum inventory levels, with color coded graphs showing if the supplier's inventory is needing replenishment, over the requirements, or within the min/max requirements of the customer.
 - ii) A Delivery Performance Review (DPR) is created when the Supplier Managed Inventory (SMI) supplier doesn't stay within the minimum and maximum inventory levels established by the customer. Along with the DPR being created, an email alert is sent to the customer and supplier when the inventory falls below the minimum level or rises above the maximum level. The DPR's created in SMI are included in the supplier rating.
 - iii) E-mail notification sent to the supplier and the customer's planner when inventory levels fall below minimum requirements.
 - iv) Immediate update and display of on-hand and in-transit inventory levels recognizing receipts, ASNs, and inventory usage.
 - v) SMI can be used in conjunction with releases.
 - vi) There are multiple methods available to calculate required receipt quantity for suppliers takes into account standard pack quantity, inventory on-hand, in-transit inventory, and quantity received, as well as current/planned production rates.

3.2 Project Business Releases

There will be one phase for this project.

3.3 WBS High Level Milestones

Pilot Plant Implementation



3.4 Functional Area Technology Solution Information

3.4.1 Functional Area Technology Solution (Scope)

The OMS project's objective is to provide the capability to publish and receive planning and operational data via the Internet for all EDI and non-EDI capable suppliers in support of the Shared Services Network business plan.

The goals of the project is to

- Create and publish 'Logistics Releases' to all suppliers.
- Provide an alternative for non-EDI suppliers to be able to send ASN information to Ryder and to a client.
- Pilot the above capabilities for an initial Ryder customer.
- Install SupplyWeb as part of the Ryder SSN solution to leverage its capabilities in future Shared Services Center offerings. These SupplyWeb capabilities will be configured by Brain but will not be implemented for any client in this project.
 - Supplier Managed Inventory (SMI) capability
 - Blanket Purchase Orders
 - Kanban Replenishment

3.4.2 Limitations / Out of Scope

- Future implementations may need to provide infrastructure upgrades for more Internet throughput, additional disk storage for SupplyWeb and LPS databases, additional backup capabilities due to additional data requirements.
- The effort required to implement OMS for a specific customer is not included in this proposal. This includes determining specific customer requirements, development of unique processes to push ASNs to the customer, project management, etc.
- Development of a support plan for this product is not included.

- APS migration to LPS not included in scope for any existing Ryder customers.
- The effort to setup a customer within LPS is not in scope. This effort includes one time data feeds into LPS.
- The effort to receive EDI 862 or other files containing customer orders required for the Logistics Release into the LPS database is not included in this scope and is assumed to already be in place.
- BrainEX product not included in scope (TCP/IP based message server to handle routing of data via ANX, bisynchronous communication and VANs)
- Track and Trace status update from suppliers logistic release update to Ryder's JIT
- Ryder OMC Exception Management System update from the suppliers logistic release update.
- Routing of ASNs to the Ryder JIT system is not included.
- No effort is included for building route execution of the Logistic Release or to forward this information to the current JIT system for processing.
- The following capabilities will not be implemented and will require additional effort and cost that is not included in this proposal.
 - Supplier Managed Inventory
 - Kanban replenishment
 - Blanket Purchase Orders

3.4.3 Critical Success Factors

- Ability of Brain to configure SupplyWeb to meet our detailed requirements.
- Ability of Ryder personnel to be able to configure SupplyWeb for future implementations with little involvement (cost) from Brain.
- Ability for the Ryder business team (Tom Kroswek's LE team) to provide Level 1 support.
- Approval and successful completion of current LPS and DMS RCE implementations and migration of first client to the LPS system
- Adequate demand and sales of OMS services in the market place to support development costs for this product.
- Success pricing strategy for OMS

3.4.4 Assumptions

- 1) General
 - a) No 3rd party monitoring tools installed. Monitoring, development and other tools are expected to be available from the DMS RCE.
 - b) LPS is required to be operational and in production prior to implementing the initial OMS customer.
 - c) Initial OMS customer must already have its part packaging and supplier data successfully loaded on LPS prior to implementation.
 - d) LPS must be successfully receiving customer orders for the initial OMS customer prior to implementation.
 - e) No clustering or load balancing capability for SupplyWeb servers. Only a single set of SupplyWeb servers will be installed.
 - f) Single Sign-on not included in scope. (i.e. RyderLSC logon versus Brain SupplyWEB logon)
 - g) Receipt functionality not included.
- 2) Ryder effort

- a) Ryder labor will primarily be for support of Brain techs to install system. Ryder will not be configuring software, etc. Ryder will fully participate in the install and implementation as a training exercise for Ryder.
- b) All Ryder labor costs are at \$80 / hour.
- c) A daily logistics release generation process was considered for developing estimates.
- d) These are high-level estimates. Business processes using these IT capabilities have not been detailed out nor have process integration with load optimization tools such as TM Modeler or with operational tools such as JIT.
- e) One SupplyWeb update per year is included in this project - including PM, installation, regression and QA testing included.
- f) Ryder will be responsible for the testing effort.
- g) Minimal DBA system/application tuning and monitoring required of Informix database.
- 3) SupplyWeb
 - a) SupplyWeb hardware/software will be installed at Farmington Hills
 - b) SupplyWeb hardware/software will be maintained/managed at Farmington Hills
 - c) SupplyWeb will update LPS with ASN data from suppliers and receive logistics information from LPS
 - d) SupplyWeb plugs into existing customer data interface – ability to receive releases from GenTran
 - e) Brain SupplyWEB can purge ASN's based on date/time interval.
 - f) Brain estimates an 8 month timeline for implementation of 5 plants.
 - g) User connectivity charges for SupplyWeb will be passed on to the users (suppliers) up to \$40 / month.
- 4) Timing
 - a) Estimated 5 days to get Servers ready for Brain tech's to install their software. Then to place into LAN and in DMZ
- 5) Scope
 - a) Costs include implementation of up to 5 plants. Additional plants would require additional SupplyWeb licensing charges.
 - b) Testing the application, assigning user ids, communicating with the users and troubleshooting non-IT related problems is to be handled by the Ryder business team.
 - c) At the end of this project, OMS will be base lined for future implementations requiring Logistics Releases and ASN creation. Delivery of ASN is out of scope
 - d) Current Ryder JIT System will execute the route plan.
- 6) EDI
 - a) Customer accepts ASN from Ryder on behalf of supplier. (SupplyWEB ASN Form used to create ASN by supplier).
 - b) Microsoft Biztalk will be used to format and send ASN to the customer. Customer may choose preferred method between EDI, XML, or IDOC format to receive ASN data.
 - c) EDI VAN costs not included.
- 7) Design and Testing
 - a) A detailed design will be done and approved prior to coding. This will greatly lessen the risk of undefined requirements and technical problems appearing during development and testing.
 - b) It is assumed that testing will play a key role during development in order to assure as early as possible that the application will perform to specification over the Internet.
- 8) Technical

- a) The database and certain application components of LPS will need to be completed prior to proceeding with the final design and development of OMS. The database and functions required as a basis to design and develop a logistics release and ASN import will need to be finalized.
 - b) SupplyWeb database will be hosted on an Informix database.
 - c) OMS will be deployed over the Internet and will be secured by a user profile and password. A dual sign-on will be required for logging on to www.RyderLsc.com and then to the SupplyWeb product.
- 9) Support
- a) Level 1 support provided by Ryder Operations who will provide and man a 1-800 number provided to all web users. Level 1 support will handle re-setting of user passwords, application help, and documentation of user problems. Unresolved issues will be forwarded to Level 2.
 - b) Level 2 support to be provided by LPS, OMS application and infrastructure IT team at Farmington Hills.
 - c) Level 3 support also known as vendor support will be provided Brain North America for SupplyWeb.

3.4.5 As-Is Current Systems Model

Currently, the work to be done by this system is performed manually

3.4.6 Required Reports

Bill of Lading from ASN (via SupplyWeb)

Bar code label printing based on ASN (via SupplyWeb)

Logistic Release (via SupplyWeb)

3.4.7 Risk / Risk Mitigation Strategy

Ryder may be financially liable for the timely delivery of ASNs to its customers. There are no fail-over or load-balancing capabilities for SupplyWeb or LPS servers. Although this risk is accepted under this current proposal for this pilot, the business team may require these additional capabilities to be funded on a subsequent project.

Suppliers need to be willing to pay up to \$40 / month for SupplyWeb connectivity charges. However, 50 supplier connections are included per plant.

Performance of SupplyWeb on proposed hardware will be adequate to support the customer base planned that will be hosted on this hardware (and that will financially support this RCE). Performance and user experience will be based on the current processing load and is not possible to estimate at this time. At this time, we do not know the number of customers, plants and suppliers that the proposed architecture can support (may be able to get an idea from Brain based on their current install base experience)

There is no fault-tolerance or load balancing capability provided by this RCE. There may be considerable downtime if a hardware component fails before the system is back in operation. Since all customers are hosted on one set of hardware, all OMS customers would be affected.

3.4.8 E-Commerce Data Delivery

This project will build or install a web application that will be accessible in a secured manner from www.ryderlsc.com

3.4.9 Infrastructure Technical Architecture

Section 4.0 - Budget

4.1 Update Project Budget Cost Model

Please see related budget document: [OMS Project Costs v7.xls](#)

Section 5.0 – Disclaimer / Approvals

5.1 Disclaimer

Signing/Approval of this document constitutes acceptance of the **Functional Design** solution included in this document between Ryder and Ryder and all extended/interested parties of Ryder. Ryder is responsible for coordinating and achieving consensus with all Ryder extended/interested parties to ensure acceptance of the solution contained herein. Ryder signature/approval on these documents connotes that this client socialization and agreement has occurred. After the document is signed/approved, any changes are considered changes to the scope of the project and require additional review, approval and funding prior to implementation. Moreover, these changes will be delivered in business releases subsequent to the initial implementation, if they cannot be accommodated in the initial project timeline.

5.2 Signature Page

Ryder

| Name | Title | Date | Approval |
|---------------|-----------------|------|--------------------------|
| Tom Kroswek | Business Owner | | <input type="checkbox"/> |
| John Holbel | Product Manager | | <input type="checkbox"/> |
| Tony Han | IT Lead | | <input type="checkbox"/> |
| James Herndon | IT Director | | <input type="checkbox"/> |
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